

ABSTRACT OF THE DISCLOSURE

A valve arrangement includes a one-piece piston-diaphragm member. The one-piece piston-diaphragm member includes a connecting rod terminating at a piston head. The piston head defines a relief aperture arrangement extending between oppositely disposed pressure-receiving surfaces. The one-piece piston-diaphragm member includes an adapter with a diaphram molded over the adapter. The diaphragm is oriented to form a seal with the housing, when the valve arrangement is operably installed within a housing. The valve arrangement includes a plate in movable covering relation to the relief aperture arrangement in the piston head. The plate forms a releasable seal arrangement with the relief aperture arrangement. The valve arrangement is useable in a closed crankcase system including an air filter, an engine, and a blow-by filtration system. The valve arrangement is operably installed in the blow-by filtration system downstream of the crankcase to receive blow-by fluid. A method for regulating pressure in a closed crankcase system includes directing blow-by fluid from an engine crankcase to a valve arrangement. The valve arrangement includes a one-piece piston-diaphragm member. The flow of blow-by fluid is controlled through a relief aperture arrangement in a piston head by applying force against a plate to hold the plate in covering relation to the relief aperture arrangement. The flow of blow-by fluid is controlled to downstream components by applying a force against the second pressure-receiving surface of the piston head.